Application No. 10/553,429

Reply to Office Action dated October 20, 2008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

 (Currently Amended) A method of operating a wind power installation, the method comprising:

detecting a first light intensity in a region of direct light irradiation <u>using one of at</u>

<u>least three light sensors, the at least three light sensors are substantially uniformly spaced apart</u>

from one another about a pylon of the wind power installation;

detecting a second light intensity in a shadowed region using one of the at least three light sensors; and

shutting down the wind power installation if a difference between the first light intensity and the second light intensity is greater than a predetermined value.

- (Previously Presented) A method according to claim 1 wherein shutting down the wind power installation includes shutting down the wind power installation only at a predetermined position of a sun.
- (Previously Presented) A method according to claim 2 wherein the wind power installation is at least temporarily shut down at a predetermined position of the sun.
- 4. (Previously Presented) A method according to claim 2 wherein predetermined positions of the sun at which shutdown of the wind power installation can be triggered are stored in the wind power installation or at a control and/or data processing apparatus associated with the wind power installation.

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 (Currently Amended) A method according to claim 1, further comprising: determining the difference between light and shadow-using a plurality of light

sensors; and

effecting an evaluation from the determined difference using a data processing program.

 (Currently Amended) A wind power installation, comprising: first means for detecting light intensity in a first region;

second means for detecting light intensity in a second region that is less illuminated relative to the first region;

third means for detecting light intensity in a third region; and

a data processing apparatus which controls the wind power installation and in which are stored positions of a sun or values representative thereof, wherein shutdown of the wind power installation is adapted to take place based at least in part on a comparison between the detected light intensities and the stored positions of the sun or values representative thereof.

- 7. (Previously Presented) The wind power installation according to claim 6 wherein a plurality of light sensors comprise the first and second means, through which respectively current intensity of light and shadow or intensity of light and shadow ascertained over a certain time is measured, and wherein data determined by the light sensors are processed by the data processing apparatus and the shutdown of the wind power installation is effected if a difference between light and shadow is above a value if a position of the sun is assumed.
- (Previously Presented) The wind power installation according to claim 7
 wherein at least three substantially uniformly spaced said sensors are arranged around the wind
 power installation.
- (Previously Presented) The wind power installation according to claim 6, further comprising a display device to reproduce a status of shadow-based shutdown.

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10. (Currently Amended) The wind power installation according to claim 6 wherein the data processing apparatus is programmable and adapted to store additional beyond the stored positions of the sun, fresh positions of the sun for further immission points are adapted to be stored, which is effected by programming.

 (Previously Presented) A wind farm having a plurality of wind power installations according to claim 6.

12. (Previously Presented) A wind power installation, comprising:

a data processing apparatus which controls the wind power installation and in which are stored sun positions or values representative thereof, in respect of which shutdown of the installation is adapted to take place,

wherein the wind power installation is coupled to at least three light sensors which are arranged uniformly spaced around the wind power installation and through which respectively current intensity of light and shadow or intensity of light and shadow ascertained over a certain time is measured, and wherein the data determined by the light sensors are processed by the data processing apparatus and shutdown of the wind power installation is effected if a difference between light and shadow is above a predetermined value when a predetermined position of the sun is assumed.

13. (Previously Presented) A wind power system, comprising:

a plurality of spaced apart detectors that detect light intensity at different regions, the plurality of detectors includes a first detector to detect a first light intensity in a first region; and a second detector to detect a second light intensity in a second region, the second light intensity being a lower light intensity relative to the first light intensity; and

a control system coupled to said first and second detectors and adapted to disable at least a portion of the wind power system if a difference between the first light intensity and the second light intensity is greater than a value.

- 14. (Previously Presented) The wind power system of claim 13 wherein the first and second detectors comprise part of a plurality of substantially uniformly spaced detectors to detect light intensity at different regions.
- 15. (Previously Presented) The wind power system of claim 13 wherein the control system is adapted to disable the portion of the wind power system based on a comparison of a value associated with the detected first and second light intensities with stored values associated with a position of a sun.
- 16. (Previously Presented) The wind power system of claim 15 wherein the control system is adapted to use software to perform the comparison of the value associated with the detected first and second light intensities with stored values associated with the position of the sun.
- 17. (New) The wind power installation of claim 12, further comprising a display device configured to display a status of shadow-based shutdown.
- 18. (New) The wind power installation of claim 12 wherein the data processing apparatus is further configured to store additional positions of the sun for additional immission points via programming.
- 19. (New) The wind power installation of claim 12 wherein the wind power installation does not shutdown unless the difference between light and shadow is above the predetermined value for a predetermined duration of time.
- 20. (New) The wind power installation of claim 19 wherein the predetermined duration of time is in a range of 5 minutes to 10 minutes.

for the predetermined position of the sun; and

- 21. (New) The wind power installation of claim 12 wherein the wind power installation automatically starts if the difference between light and shadow falls below the predetermined value for a duration of time that is more than 2 minutes.
- 22. (New) The wind power installation according to claim 12 wherein the wind power installation automatically starts again if the difference between light and shadow falls below the predetermined value for a duration of time in a range of 5 minutes to 10 minutes.
- 23. (New) The wind power installation according to claim 12 wherein the wind power installation automatically starts again if the predetermined position of the sun has changed such that there are substantially no adverse effects due to shadow casting.
- 24. (New) A wind farm having a plurality of wind power installations according to claim 12.
- 25. (New) A method for operating a wind power installation to minimize adverse effects due to shadow casting from the sun at an immission point, said method comprising:

measuring light intensity using at least three uniformly spaced light sensors; calculating a difference in light intensity between the light sensors; ascertaining a predetermined position of the sun for the current date; comparing the difference in light intensity with a predetermined shutdown value

causing shutdown of the wind power installation based on the comparison of the difference in light intensity with the predetermined shutdown value for the predetermined position of the sun.

26. (New) The method of claim 25 wherein causing shutdown of the wind power installation includes shutting down the power installation if the difference in light intensity is above the predetermined shutdown value.